

Testimony  
Of  
Jerry Jordan  
On Behalf Of The  
Independent Petroleum Association of America  
And The  
National Stripper Well Association  
Before  
Committee on Agriculture  
Subcommittee on Conservation, Credit, Rural Development, and Research  
U.S. House of Representatives  
April 25, 2001



**STATEMENT OF JERRY JORDAN  
FOR THE  
INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA  
AND THE  
NATIONAL STRIPPER WELL ASSOCIATION  
AND**

**California Independent Petroleum  
Association  
Colorado Oil & Gas Association  
East Texas Producers & Royalty Owners  
Association  
Eastern Kansas Oil & Gas Association  
Florida Independent Petroleum  
Association  
Illinois Oil & Gas Association  
Independent Oil & Gas Association of  
New York  
Independent Oil & Gas Association of  
Pennsylvania  
Independent Oil & Gas Association of  
West Virginia  
Independent Oil Producers Association  
Tri-State  
Independent Petroleum Association of  
Mountain States  
Independent Petroleum Association of  
New Mexico  
Indiana Oil & Gas Association  
Kansas Independent Oil & Gas  
Association  
Kentucky Oil & Gas Association**

**Louisiana Independent Oil & Gas  
Association  
Michigan Oil & Gas Association  
Mississippi Independent Producers &  
Royalty Association  
Montana Oil & Gas Association  
National Association of Royalty Owners  
Nebraska Independent Oil & Gas  
Association  
New Mexico Oil & Gas Association  
New York State Oil Producers  
Association  
Ohio Oil & Gas Association  
Oklahoma Independent Petroleum  
Association  
Panhandle Producers & Royalty Owners  
Association  
Pennsylvania Oil & Gas Association  
Permian Basin Petroleum Association  
Tennessee Oil & Gas Association  
Texas Alliance of Energy Producers  
Texas Independent Producers and  
Royalty Owners  
Wyoming Independent Producers  
Association**



Mr. Chairman, members of the committee, I am Jerry Jordan, President of Jordan Energy, Inc. of Columbus, Ohio and Chairman of the Independent Petroleum Association of America (IPAA). Today, I am testifying on behalf of the IPAA, the National Stripper Well Association (NSWA), and 32 cooperating state and regional oil and gas associations. These organizations represent the thousands of independent petroleum and natural gas producers that drill 85 percent of the wells drilled in the United States. This is the segment of the industry that is damaged the most by the lack of a domestic energy policy that recognizes the importance of our own national resources. NSWA represents the small business operators in the petroleum and natural gas industry, producers with “stripper” or marginal wells. These producers are the linchpins to continued development of domestic petroleum and natural gas resources.

There are great similarities between independent producers and the agricultural community. We both succeed or fail based on effective use of natural resources. We are both price takers not price makers. For example, when oil prices dropped in 1998-99, domestic producer revenues dropped by \$19 billion. We are both dramatically effected by the actions of the commodity markets. These can particularly influence prices at the extremes by overreacting to supply and demand data – driving prices lower than they should be or pushing them too high.

Today’s hearing addresses a fundamental issue – how the current energy situation developed and what may happen in the future. IPAA believes that much of what will happen in the future will hinge on whether the nation is finally willing to define a sound national energy policy. This testimony will focus first on the nature of the petroleum market, second on the history of natural gas markets, and finally on actions that need to be taken to improve the future domestic supply of natural gas and petroleum.

## *I. The Petroleum Century*

Petroleum – the energy source that dominated the 20<sup>th</sup> Century – will continue to be pivotal for the foreseeable part of the 21<sup>st</sup> Century. It is the most versatile energy source available today. It is the most political of energy sources – the substance that makes countries go to war, the substance that countries must have to wage war. And yet, it is also a commodity – like sugar or pork bellies. As a commodity, it has been one of the most volatile the world has seen.

As the 20<sup>th</sup> Century began, petroleum was being found, produced, and wasted. In the US, states had to step into the production of petroleum to protect their resources. They created commissions to determine where wells could be developed and how much they could produce. After World War II petroleum's global nature changed the supply structure. As US demand increased and foreign supplies of petroleum became available, prices were largely defined by what refineries were willing to pay. This system worked fine for refineries but not for producers, particularly foreign producer nations that relied on petroleum sales to fund their national budgets. It led in part to the creation of the Organization of Petroleum Exporting Countries (OPEC).

By 1973 OPEC controlled enough petroleum production that if it acted collectively, it could determine whether the world had enough supply or too little; it could determine the market price. Driven by political events of the time, a band of OPEC countries found the will to restrain exports and OPEC control of prices began. Like all cartels, OPEC's strength is in solidarity and trust. By 1986 this trust was lost and OPEC members began competing for market share, driving prices to their lowest levels since the early 1970's.

Ultimately, the OPEC infighting ended and new production quotas were devised. But, at the same time, a profound change in petroleum pricing was beginning. In 1983, the New York

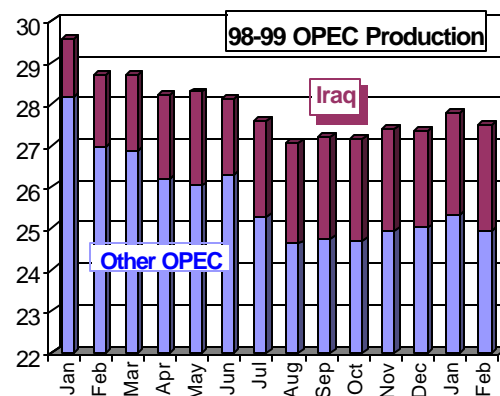
Mercantile Exchange began to trade oil futures on its commodity market. Over time, commodity market trading would become the final price maker. Petroleum prices would not be set by regulators controlling supply, by refiners stating what they would pay, or by OPEC oil ministers setting production quotas. It would be defined on the tumultuous and volatile trading floors of the NYMEX. We are seeing the consequences of this change.

### ***1998-99: Low Oil Prices and the Crisis They Created***

In late 1997 several events combined to initiate a precipitous drop in world oil prices – events that are now defining current energy issues. First, Asian economies, which had been generating the greatest increases in petroleum demand, suffered substantial contractions – lowering their growth in petroleum use. Second, OPEC – not perceiving this situation – agreed to increase production quotas. Third, the Northern Hemisphere benefited from a mild winter – reducing its petroleum demand. Fourth, weakness in the Russian economy resulted in higher exports of Russian petroleum. Fifth, Venezuela and Saudi Arabia engaged in a market share battle that led to higher volumes of petroleum exports.

Taken together, these events triggered price drops on the commodity markets. OPEC then recognized the nature of the events and initiated production reductions, but a new factor was surreptitiously entering the arena. Iraq's

petroleum production is defined by the UN sanctions program. With little notice, the UN allowed Iraq to increase the amount of production it could sell. At the beginning of 1998, Iraq exported roughly 500,000



barrels/day. By the beginning of 1999, Iraq was exporting 2.5 million barrels/day. This dramatic increase occurred while other OPEC countries were reducing production. Virtually every action to bring supply and demand back into balance was offset by Iraq increases. The commodity markets continued to drive prices down.

The consequences to petroleum production were devastating. Capital investment to develop new production and to maintain existing production was slashed throughout the world. Even the OPEC countries curtailed development projects to divert diminishing petroleum revenues to maintain national budgetary commitments to their citizens. The effects of lost capital are twofold. First, all oil wells deplete over time. While new technology has made the discovery of oil more effective, it has also allowed oil reserves to be depleted more quickly. Some recent studies suggest that the current oil depletion rate in the Gulf of Mexico is now averaging 26 percent per year. This is dramatically higher than historic rates of 3 or 4 or 5 percent per year. Without adequate investment to maintain existing production, critical resources were lost – many of which will never be recovered. Second, the loss of an investment year in the petroleum production business creates a critical time lag. The new production that was needed first to replace depleted resources and second to meet expanding demand was not there. IPAA warned in early 1999 that this loss of capital could produce serious production capacity limitations as early as 2000.

### ***1999-2000: OPEC Rebounds, But the Damage Is Done***

In March 1999, OPEC countries agreed to substantial reductions in exports; Mexico, Norway and other producer countries joined in. Prices began to rebound, but so did demand. The US economy remained robust and Asian economies recovered. By year's end, prices had returned to 1997 levels, but by then the consequences of a year's lost investment began to tell. In

the US, where 65,000 jobs had been lost, only 7,000 had been recovered; where the oil rig count had fallen by 331, it had increased by only 67. Internationally, the results were similar.

Strapped for revenues to meet national budgets, new production was not being developed and existing production was not maintained.

Continued demand growth and reducing inventories of petroleum were leading NYMEX commodity prices still higher. In March 2000, OPEC acted again – this time to increase production. It was not an easy task. When OPEC agreed to cut production, Saudi Arabia agreed to the biggest reduction – in part to offset the increased share that Iraq had acquired. Yet, when increases were at issue, no other OPEC country wanted to give market share to the Saudis, but many countries had now lost their previous production capacity – the consequence of lost investment.

While Americans demanded that OPEC “open the spigots” and let the oil flow, the reality was that the capacity was not there except for Saudi Arabia, Kuwait, and the United Arab Emirates. In its effort to raise production in

September 2000, the fundamental issue had not changed. Even after a year of high petroleum prices, new capacity is lagging because of the low prices in 1998-99. While OPEC countries, particularly Saudi Arabia talked about increasing production again if petroleum prices did not fall, Kuwait announced that

<i>International Energy Agency Estimates of OPEC Production Capacity (Sept. 2000)</i>		
<b>OPEC Member</b>	<b>OPEC Quotas (Million B/D)</b>	<b>Spare Capacity (Million B/D)</b>
Saudi Arabia	8.51	1.99
Iran	3.84	-0.12
Venezuela	3.02	-0.07
Iraq	(No Quota) 3.00	0.01
U.A.E.	2.29	0.11
Kuwait	2.10	.011
Nigeria	2.16	0.04
Libya	1.40	0.05
Indonesia	1.36	-0.01
Algeria	0.84	0.06
Qatar	0.68	0.07

it could not meet its current quota. In reality the world’s excess oil production capacity was whatever production the Saudis could muster. Even then, questions remained regarding worldwide tanker capacity, the quality of the remaining oil that can be produced, and the

accuracy of estimates of remaining spare capacity such as those of the International Energy Agency.

Since the end of 2000, OPEC has chosen to reduce its production targets. Publicly, these actions are based on its assessment of whether world oil demand will diminish either because of slower economic activity or because of historic seasonal demand fluctuations during the spring. However, it is also possible that the intense production efforts of 2000 may have stressed the facilities in these countries as it has in the United States and they require the flexibility to rehabilitate their operations. While the United States has criticized OPEC's actions, the situation reflects the tenuous nature of world oil supply following the 1998-99 oil price crisis.

**And then there's Iraq.** Since early 1999, IPAA has warned that UN policies were placing Iraq in a position where it could ultimately control the world price of oil and demand the end to UN sanctions. On September 19, 2000, the *Wall Street Journal* article, "Iraq Pumps Critical Oil, and Knows It" crystalized this risk.

Every six months, the UN revisits Iraqi sanctions and each time there is a tension over what Iraq will do. For all the talk of using the Strategic Petroleum Reserve to mitigate price concerns about heating oil or gasoline, perhaps the real issue will be whether the world can physically meet its petroleum needs if Saddam "closes the spigot." Then, the SPR will be needed for its true purpose – meeting a supply crisis. Clearly, the decision on releasing SPR oil in late 2000 was based on the politics of the Northeastern and Midwestern states. Its purpose was to manipulate the commodity markets that had little response to the OPEC increases. It would be

The Iraqi exports are significantly more than the combined spare production capacity of all other producers at this time. So the world now depends on Iraqi oil, right? "You're damned right," snapped Amer Rasheed, Iraq's oil minister....Mr. Rasheed wouldn't answer whether Iraq is likely to use its oil weapon...to seek an end, for instance, to United Nations sanctions....Saddam has played this game before."

WSJ, 9/19/2000

far more beneficial to assure that adequate low income assistance is provided to purchase heating oil or to address better ways to shift supplies of gasoline than to risk placing our economic future in Saddam's hands in an attempt to change the commodity price of oil on the NYMEX.

## ***II. Natural Gas Production: Where Price Controls Failed, The Market Succeeded***

The history of natural gas production in North America provides a clear example of both the failure of long-term price controls and the success of the competitive market. At the same time the emergence of natural gas as a commodity presents the challenges of attracting capital and developing this essential resource to meet future demand within the volatility of the market.

Natural gas and petroleum are found together – and have been since the Drake well in 1859. But, because it is a gas, natural gas required the creation of capable transportation technology to bring it to its full development. Initially, gas was used for lighting during the late 1800's, but the emergence of electric lights effectively ended this use. Inventions of burner technology and thermostats moved natural gas to broader uses. By the 1920s the invention of seamless welded pipe allowed long distance pipelines to be constructed to bring natural gas from producing regions to major northeastern and midwestern cities. This market began to expand after World War II as the residential use of clean burning natural gas was promoted in the 1950s.

### ***Price Regulation Begins To Take Its Effect***

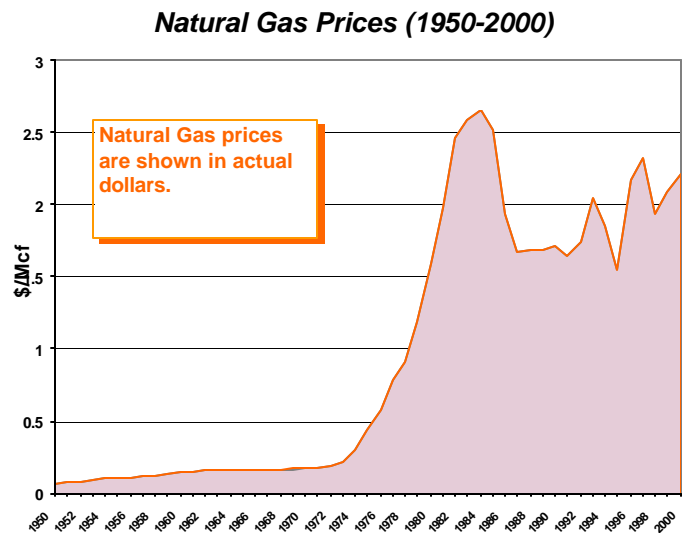
While natural gas regulation initially began as a result of the Natural Gas Act of 1938, the Supreme Court decision in the *Phillips* case in 1954 triggered the price control process under the Federal Power Commission (FPC). The FPC created a pricing system that kept wellhead prices extremely low and involved bureaucratic case procedures that delayed all decisions, for unusually long periods. The effect was to spur both residential and industrial demand, but it did

little to encourage supply. With low wellhead prices, new natural gas supplies were largely determined by exploration for petroleum production. There was little exploration for natural gas.

Thus, demand was rising and supply was not. The interstate market could not react to the situation because of the regulation that applied to its prices. But by the early 1970s, intrastate natural gas markets began to develop because these prices were uncontrolled. Nationally, however, regional spot shortages for natural gas began to develop. Natural gas demand

peaked at an all-time high in 1973 of 22 trillion cubic feet (Tcf). During the severe winter of 1976-77, gas was curtailed throughout the major consuming regions and curtailment plans were enacted by state utility regulators to ration gas. Shortages were viewed as chronic and probably worsening with time.

Demand for natural gas began to decline as supplies diminished and prices increased. The supply emergencies pushed Congress to enact the Natural Gas Policy Act of 1978 (NGPA 78). The goal of the legislation was to deregulate natural gas prices over time, to encourage exploration, and to reduce the price differentials between interstate and intrastate markets. Meanwhile, in the intrastate markets, producers, industrial users, and marketers were buying and selling gas and having it transported by displacement to the burner tips, through the lines of state regulated public utilities. But, this could not be done on an interstate basis.



### *Decontrol Benefits Consumers and the Economy*

NGPA 78 created considerable instability in the natural gas market as the Federal Energy Regulatory Commission (FERC) – the successor to the FPC – began to implement it. Congress had given FERC the task of unbundling the complex relationships in the natural gas production, pipeline, and distribution systems throughout the country. Natural gas prices were initially controlled under that law, based on their status at the time of the legislation, but they were allowed to increase under escalation provisions, and were to be deregulated completely in the mid 1980s.

While demand dropped further during the recession of 1982, the higher wellhead prices did encourage the development of new supplies of natural gas. The combination of the lower demand and the new supplies produced a “Gas Bubble” in the 1980s that benefited consumers and the national economy, with low to moderate natural gas prices through the remainder of the decade and through the 1990s.

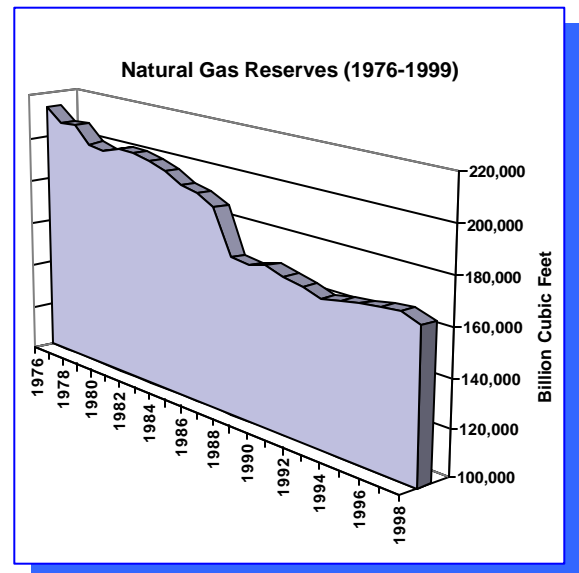
In 1990, with natural gas prices decontrolled, the New York Mercantile Exchange (NYMEX) launched its natural gas futures contract. Natural gas could be bought and sold by consumers and producers at a pre-determined time in the future, and prices could be moderated through hedging techniques. Thus, while the volatility of the commodity market can impact prices, producers and consumers can also achieve some of the longer-term price stability through the use of those techniques.

In 1985, FERC issued Order 436, allowing transportation of gas owned by parties other than the pipelines. This created a system similar to the intrastate transportation plans and thus allowed interstate gas to compete in those markets. Subsequently, FERC issued Orders 636 and

637 that provide more flexibility to pipelines to negotiate terms and conditions for capacity utilization.

### *The End of the Bubble; The Beginning of Tight Supply*

While stable prices have benefited the national economy, they have also limited the capital available to increase natural gas exploration and production. Lower returns on investment and the loss of access to government controlled resources, particularly in the 1990s, have resulted in deterioration of proven natural gas reserves. But, the petroleum price collapse of 1998-99 created the most devastating blow. These historically low petroleum prices resulted in capital expenditure budget cuts for domestic producers exceeding 30 percent in 1999. The natural gas drilling rig count dropped by over 40 percent at its lowest point. In 1999, new wells failed to replace existing reserves.



The petroleum price recovery and the industry's recognition that future natural gas demand would increase as more and more electricity will be generated by gas powered turbines have generated a robust rebound in drilling for natural gas. Rig counts are at record levels and new production is forthcoming. But, it will take time for new exploration to produce adequate gas to reverse the recent negative trends. As a result, the NYMEX is reflecting this tight supply in the current market prices.

### ***III. Building A Sound Energy Policy***

#### ***A Nation Dependent on Fossil Fuels***

National energy policy must reflect an accurate understanding of the nature and politics of world oil supply and demand. The US is the second largest petroleum producer in the world; yet, domestic production has dropped by over 10 percent – to 5.8 million barrels/day – since the 1998-99 low price crisis. To meet future natural gas demand and provide the nation with its true strategic petroleum reserve of oil – domestic production – national policies must recognize the importance of a healthy domestic exploration and production industry.

During the past three decades the United States has become more dependent on energy and more dependent on foreign energy. While there have been numerous efforts to define a national energy policy, none have been successful. Today, the world is operating with its tightest supply of petroleum and the United States is facing tight natural gas supplies. Now is the time to clearly address national energy policy and build the program that is needed to meet future demand.

Like it or not, the nation will be dependent on fossil fuels for the foreseeable future. In particular, petroleum and natural gas currently account for approximately 65 percent of the nation's energy supply – and will continue to be the significant energy source. Natural gas demand, for example, is expected to increase by more than 30 percent over the next decade.

#### ***Independent Producers – The Linchpin to Future Domestic Petroleum and Natural Gas***

It is important to recognize that the domestic oil and natural gas industry has changed significantly over the last fifteen years. The oil price crisis of the mid-1980's and policy choices made then triggered an irreversible shift in the nature of the domestic industry. Independent

producers of both oil and natural gas have grown in their importance, and that trend will continue. Independent producers produce 40 percent of the oil – 60 percent in the lower 48 states onshore – and produce 65 percent of the natural gas. They are becoming more active in the offshore, including the deep water areas that have previously been the province of the large integrated companies. At the same time those large companies are now mainly focusing their efforts overseas, in addition to Alaska and the offshore, because they are aiming their investments to seek new and very large fields. Domestic energy policy must recognize this reality.

### *Recognizing The Role of The Market*

Future energy policy should rely on market forces to the greatest degree possible. For natural gas the market is strong and active. Natural gas supply is essentially North American and overwhelmingly from two countries that rely on private ownership and the free market – the United States and Canada. Currently, exploration and development of natural gas in both countries is being aggressively pursued when the opportunities are there, and can be accessed. In the United States drilling rig counts for natural gas are running at rates that are as high as they have ever been since natural gas drilling was distinguished from petroleum. The principal constraints are finding the capital to invest, getting access to the resource base, finding competent personnel, and obtaining rigs. If the market is allowed to work, it will continue to draw effort to produce this critical resource for domestic consumption.

Oil, however, is a different situation. In making decisions regarding developing domestic petroleum resources, the nature of the world petroleum market must be recognized. Although the United States remains the second or third largest producer of petroleum, it is operating from a mature resource base that makes the cost of production higher than in competitor nations. More

importantly, most other significant petroleum producing countries rely on their petroleum sales for their national incomes. For them, petroleum production is not driven by market decisions. Instead, their policies and their production is determined by government decisions. Most are members of OPEC. Several are countries hostile to the United States like Iraq, Libya, and Iran. Even those that are generally supportive of the United States, like Saudi Arabia and Kuwait, are susceptible to unrest from both internal and external forces.

Thus, the market price for petroleum will be largely framed by production decisions driven not by the market, but by the politics of these countries – both by internal issues and global objectives. United States domestic policy decisions must reflect this reality – looking to this factor in taking actions that can affect domestic production and producers. But, more importantly, it must recognize that a healthy domestic oil production industry is also essential for a healthy domestic natural gas industry, because they are inherently intertwined.

For example, the failure of the United States to recognize the need to respond to the low oil prices of 1998-99 resulted in adverse consequences for both oil and natural gas production. The lost 10 percent of domestic oil production has been mostly made up by imports from Iraq. And, in addition, the tight natural gas supplies this year are partially attributable to the drop in natural gas drilling in 1998-99 when oil prices were low and capital budgets for exploration and production of both oil and natural gas were slashed by producers because drilling under those conditions made no economic sense.

It is equally important to recognize that while all of these factors influence the ultimate prices of oil and natural gas, it is the commodity markets that have the final say. The role of these markets has emerged from a minor factor in the mid-1980s, when oil and natural gas trading began, to the dominant force today. While many people want to point toward OPEC or

big oil, the ultimate price maker is the trading floor of the commodity markets. This has added a new volatility to oil and natural gas prices. Its impact is still poorly understood but must be considered.

However, it is clear that the market reacts to whatever information it can obtain. During the low oil prices of 1998-99 and even during the high prices of 2000, the impreciseness of this information likely created incorrect perceptions of the fundamental situation in the market. The widely held belief that there were large volumes of crude oil available that helped suppress prices in the 1998-99 time period proved incorrect. But, it also worsened the state of the industry such that productive capacity was lost. One action that has been developed to respond to this problem is the creation of an Oil Data Transparency initiative by the Department of Energy to create better information worldwide on supply and demand.

### *Providing Access to Essential Capital*

The nation must avoid making bad policy choices like it has in the past. For example, because oil and natural gas exploration and production are capital intensive and high-risk operations that must compete for capital against more lucrative investment choices, much of its capital comes from its cash flow. The federal tax code is a key factor in defining how much capital will be retained. In the late 1970's and early 1980's when oil prices were high and drilling activity was soaring, the industry was hit by the Windfall Profits Tax that pulled a net \$44 billion from the industry at a time when it could have been invested in new exploration and production. In addition, in 1986, when the industry was recovering from the low oil prices of that year, the Alternative Minimum Tax (AMT) was created. The AMT sapped capital from the industry when it was desperately needed. From 1986 to 1997 (before the latest price crisis) domestic oil production dropped by 2 million barrels per day – roughly 25 percent of 1986

capacity. Thus, those tax policies stifled the industry at a time when U.S. energy demand was increasing significantly.

Instead of such counterproductive tax actions, the Administration and Congress need to enact provisions designed to (1) encourage new production, (2) maintain existing production, and (3) put a “safety net” under the most vulnerable domestic production – marginal wells. Congress has considered a mix of tax reforms that have widespread support. They include provisions to allow expensing of geological and geophysical costs and of delay rental payments that encourage new production, extending the net operating loss timeframe and revising percentage depletion that assist both new and existing production, and a countercyclical marginal well tax credit when prices fall to low levels. All of these are programs that independent producers need because their revenues are limited to their production

Beyond these immediately needed policy changes, new tax policies must be developed to encourage renewed exploration and production needed to meet future demand, particularly for natural gas. In 1999 the National Petroleum Council released its *Natural Gas* study projecting future demand growth for natural gas and identifying the challenges facing the development of adequate supply. For example, the study concludes that the wells drilled in the United States must effectively double in the next fifteen years to meet the demand increase. Capital expenditures for domestic exploration and production must increase by approximately \$10 billion/year – roughly a third more than today. While these estimates are cast in the context of natural gas, the task to maintain or even enhance domestic crude oil production could be similarly stated. Generating this additional capital will be a compelling task for the industry. As the National Petroleum Council study states:

*While much of the required capital will come from reinvested cash flow, capital from outside the industry is essential to continued growth. To achieve this level of capital investment, industry must be able to compete with other investment opportunities. This poses a challenge to all sectors of the industry, many of which have historically delivered returns lower than the average reported for Standard and Poors 500 companies.*

For the industry to meet future capital demands – and meet the challenges of supplying the nation’s energy – it will need to increase both its reinvestment of cash flow and the use of outside capital. The role of the tax code will be significant in determining whether additional capital will be available to invest in new exploration and production in order to meet the \$10 billion annual target.

There are a number of different approaches that should be considered. The AMT remains a constriction. While the AMT was modified to exclude percentage depletion from the calculation of the alternative minimum taxable income (AMTI), independent producers remain subject to the AMT with regard to intangible drilling costs (IDCs). Specifically, if “excess intangible drilling costs” exceed 65 percent of net income from all oil and gas production, these costs are “potential preference items”. AMTI cannot be reduced by more than 40 percent of the AMTI that would otherwise be determined if the producer was subject to the IDC preference. This 40 percent rule forces many independent producers – particularly smaller ones – to curtail drilling once the expenditures become subject to the AMT. Now is a time when drilling needs to increase significantly. It makes no sense for the federal tax code to be a barrier to this effort.

Some of the future focus also needs to be directed to getting more out of existing resources. For example, while the Enhanced Oil Recovery tax credit exists, it is based on

technologies that are twenty or more years old. This provision should be restructured and updated.

Equally significant, policies need to address encouraging more new development. Proposals to encourage domestic exploration and production should be created. A number of concepts are already in play and need to be more fully evaluated.

For example, the Section 29 tax credit for unconventional fuels proved to be a strong inducement to developing those resources. It applies to wells drilled prior to 1993 and uphole completions thereafter. Just last July, the Federal Energy Regulatory Commission acted to reinstate its certification process to address many wells that would otherwise qualify for the Section 29 tax credit. But, the existing credit expires in 2003 and provides no incentive for current development since the qualifying wells had to have been drilled before 1993. S. 389 extends the existing credit and creates a second drilling window that also applies to heavy oil.

Fundamentally, the question facing the nation is how to marshal the capital to develop its domestic resources. To date the \$10 billion annual spending increase target has not been met. At issue is how to obtain capital for domestic development. One source is the capital markets and some of this amount will come from there, but it has significant drawbacks. First, the capital markets have yet to show a strong interest in the oil and gas exploration and production industry despite the recent high prices of both commodities. Second, where the capital markets are likely to focus their attention will be on large companies. So, while some large independents may derive some of their capital from these markets, it will only be a portion and smaller independents will need to look elsewhere. Third, there is no guarantee that such capital will go into domestic production because even with regard to investment in exploration and production activities, capital must compete against other projects including international ones.

The next source of capital will be from the revenues generated by higher production and higher prices. The magnitude of this capital may be overstated because just as prices for oil and natural gas have increased, prices for drilling rigs and other costs are also increasing which will squeeze the capital that is available. Moreover, this capital will also be directed to the most promising projects, so there is no guarantee that it will be invested domestically. Finally, this revenue will be significantly reduced by taxes.

The challenge, then, is to create a mechanism to direct the capital to domestic production. One such approach would be to create a “plowback” incentive that would apply to expenditures for domestic oil and natural gas exploration and production. This type of proposal would encourage capital formation and development of domestic wells provided it was immediately beneficial. Therefore, it would have to be creditable against both regular and AMT taxes and any excess available for carryback and carryforward. It would address the compelling need to improve natural gas supply as well as reduce the growing dependency on foreign oil. It must, in fact, apply to both oil and natural gas because of their inherent link. Moreover, because of this inherent link, a healthy domestic natural gas exploration and production industry cannot exist without a healthy comparable oil industry.

## **IPAA Capital Access Policy Recommendations**

### **Near-Term Tax Reforms**

- Allow expensing of geological and geophysical costs and of delay rental payments.
- Allow a 5-year net operating loss carry-back for independent producers.
- Eliminate the net income limitation on percentage depletion for marginal wells and the 65 percent net taxable income limit on percentage depletion.
- Create a counter-cyclical marginal well tax credit.

### **Other Tax Reforms**

- Modify the Alternative Minimum Tax.
- Create a drilling or plow back incentive.
- Expand the Enhanced Oil Recovery tax credit.

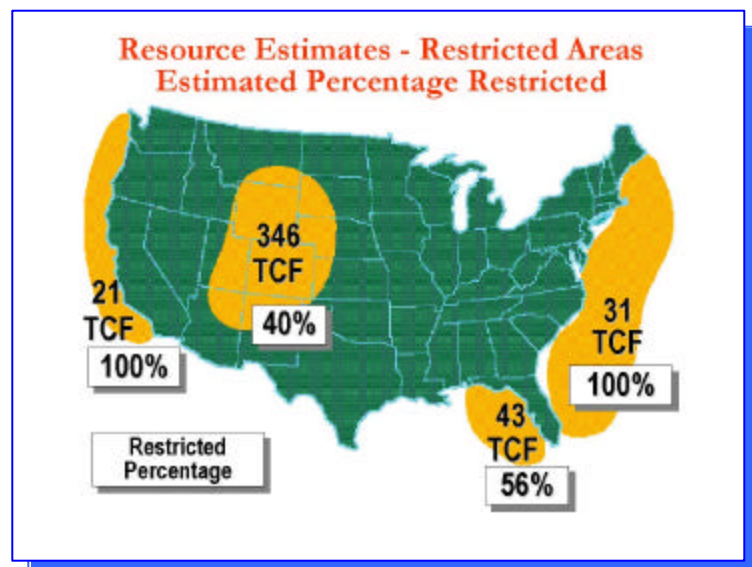
### *Providing Access to The Natural Resource Base*

National energy policy must also recognize the importance accessing the natural resource base. In 1999 the National Petroleum Council in transmitting its *Natural Gas* study concluded:

*The estimated natural gas resource base is adequate to meet this increasing demand for many decades.... However, realizing the full potential for natural gas use in the United States will require focus and action on certain critical factors.*

Much of the nation's natural gas underlies government-controlled land both offshore and onshore. Policies in these areas have constrained or prohibited access largely based on fears of environmental harm. But, these resources can be developed in an environmentally sound and sensitive manner. The Department of Energy recently released a comprehensive report, *Environmental Benefits of Advanced Oil and Gas Exploration and Production Technology*, demonstrating that the technology for development of resources in sensitive environments is available. And, it is being employed, when exploration is allowed.

Without policy changes, the nation may not be able to meet its needs. Currently, over 75 trillion cubic feet (TCF) of natural gas in the offshore is off limits to development because of moratoria that are based on technologies that have been replaced decades ago. The rationale for these moratoria is outdated and inaccurate; there must be a reassessment of these decisions in the context of today's technology and tomorrow's needs.



Moreover, it is essential that those areas of the offshore that are scheduled for leasing remain accessible. Specifically, Lease Sale 181 lying off of the Alabama coast must be undertaken. Unfortunately, after years of negotiation to allow this lease sale within negotiated constraints related to its military use and moratoriums that have been established for the Eastern Gulf of Mexico off of Florida, uncertainty remains that some political efforts will be made to halt the sale. Lease Sale 181 is projected to be a significant natural gas area with estimated of about 7.8 TCF – enough natural gas to fuel Florida’s 5.9 million households for 16 years. Estimates of potential oil reserves are on the order of 1.9 billion barrels. To prevent this sale in view of the extraordinary environmental safety record of Gulf of Mexico operations when natural gas demand is accelerating would be tragic energy policy decision.

Even in those offshore areas of the Gulf of Mexico that are open for development, the federal policies that determine royalties will also significantly define the extent to which development will occur. For example, over the past half-decade, Gulf of Mexico development has soared, partly because of the Deep Water Royalty Relief Act that specified how royalties would be determined for a set time period. This allowed producers to plan their investments better. However, the Deep Water Royalty Relief Act was largely used by large integrated companies and its specific provisions expired in 2000. Now, as independent producers are also seeking deep water opportunities, the planning window is narrow and the policies are less certain. On the Outer Continental Shelf, marginal properties remain that could be developed if the royalty policies were right. All of these issues need to be addressed with the full understanding that independent producers will be increasingly willing to develop these areas as large integrated companies look toward the Ultra-deep Water and overseas for the large fields that they need to find.

Onshore, over 100 TCF of natural gas is under government controlled land in the Rocky Mountains. An inventory of these resources is underway. It is an important first step. But, it is equally important to understand that access to these resources is limited by more than just moratoria. The constraints differ. Monument and wilderness designations prohibit access to some areas. Regulations like the Forest Service roadless policy and prohibitions in the Lewis and Clark National Forest are equally absolute.

At the same time the permitting process to explore and develop resources often works to effectively prohibit access. These constraints range from federal agencies delaying permits while revising environmental impact statements to habitat management plans overlaying one another thereby prohibiting activity to unreasonable permit requirements that prevent production. There is no single solution to these constraints. What is required is a commitment to assure that government actions are developed with a full recognition of the consequences to natural gas and other energy supplies. IPAA believes that all federal decisions – new regulations, regulatory guidance, Environmental Impact Statements, federal land management plans – should identify, at the outset, the implications of the action on energy supply and these implications should be clear

## **IPAA Access Recommendations**

### **Overall**

- Provide mechanisms to assure that the energy supply consequences of federal decisions be identified early in the decision process and made clear to the decision makers.

### **Offshore**

- IPAA believes it is critical to continue to provide a royalty structure that encourages offshore development. IPAA and others involved in the offshore are working together with MMS and DOE to create a royalty structure that will enhance domestic production.
- Offshore moratoria policies need to be revisited and revised.

### **Onshore**

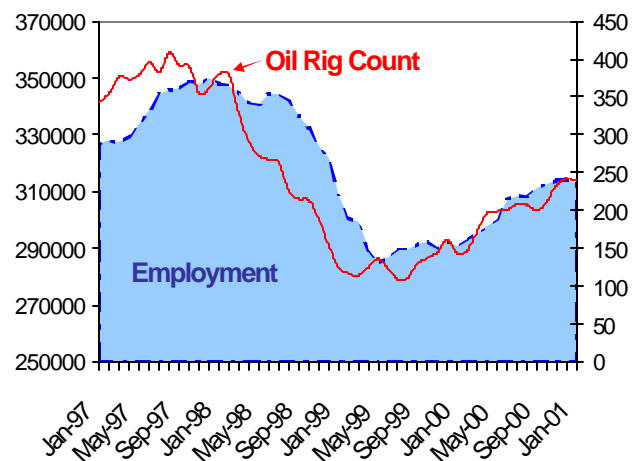
- Access in the Rockies won't be resolved by a single act. Many areas are limited during certain times of the year by management plans designed to protect various species. While each plan individually provides opportunities for resource development, collectively, they interact to effectively prohibit natural gas and petroleum extraction. The industry must deal with a mosaic of limitations. Some involve land that is completely excluded from natural gas and petroleum exploration and production. Regulatory actions need to be undertaken to consider the energy implications of decisions – both individually and collectively.

to the decision maker. Such an approach does not alter the mandates of the underlying law that is compelling the federal action, but it would likely result in developing options that would minimize the adverse energy consequences.

### *There's No Short Term Fix – Recovery Will Take Time*

Any realistic future energy policy will take time. There is no simple solution. Most assessments conclude that natural gas prices will remain near current levels for the foreseeable future. Crude oil estimates are less certain because of its international nature. However, the general perception is that prices will exceed \$20 per barrel over the next several years by several dollars. How these factors will affect domestic production is significant to improving national energy policy.

The popular call for OPEC to “open the spigots” failed to recognize how serious crude oil production has been constrained by the low oil prices of 1998-99 and the larger issue of the health of the domestic industry. While the producing industry lost 65,000 jobs in 1998-99, only about 40 percent of those losses have been recovered and they are not the same skilled workers. If measured by experience level, the employment recovery is far below the numbers. Less obvious, but



equally significant, during the low price crisis equipment was cannibalized to keep operating and support industries were devastated. Even now, while natural gas drilling rig use has reached record levels, oil rig counts are only about 60 percent of their 1997 level. It will take time to

develop the infrastructure again to build new drilling rigs and provide the skilled services that are necessary to rejuvenate the industry.

For example, a number of Texas and New Mexico community/junior colleges are recreating programs to train rig workers – programs that were shut down during the price crisis. This is an area where federal assistance could improve the success of the programs and speed their efforts.

While natural gas supply issues are largely related to capital access, resource base access, adequate rig availability, and competent operating personnel, there are longer term issues that must be fully understood as they affect domestic crude oil production. Some of these have been suppressed as the industry has had to respond first to the low oil prices and then to rebuild itself as prices increased and supply tightened. For example, domestic refining capacity has shifted during the past decade or so. Many of the smaller refineries scattered throughout the middle part of the country have shut down due to increased capital requirements – in part compelled by the requirements of the Clean Air Act. These refineries were purchasers of domestic crude and as they close down, this affects where domestic crude can be sent and its economics. Similarly, pipelines that once took crude oil to refineries are being reconfigured to take product from these refineries. This both eliminates a domestic crude oil market and may affect the regional market of another refinery that is purchasing local crude. The consequence may be to create a preference for foreign crude over domestic. Similarly, crude oil pipelines connecting to Canada can adversely affect domestic production in northern states and those supplying midwest refineries.

The interrelationships between energy sources can also have adverse effects. For example, California heavy crude oil production is confronted with its own problems resulting from high natural gas prices. Because this production requires special treatment to heat it, natural gas is used to generate steam for injection. However, with natural gas prices at current high levels operating costs are so high that production is being shut in and may be lost. High electricity costs can have the same effect. Electricity is one of key operating costs for crude oil production. Particularly for marginal wells, high electricity costs can take away the profitability of a well and force it to shut down.

### **Additional IPAA Policy Recommendations**

- Continue Dept. of Energy Oil Data Transparency initiative to develop more accurate information on worldwide supply and demand.
- Create initiatives to train oil and natural gas production workforce through existing and new education programs
- Consider federal financial instruments like the PADDIE MAC concept that would create a FANNIE MAE-like program to help lower the capital costs to the smaller producers so essential to maintaining the nation's marginal wells.

### ***Conclusion***

*Overall, attracting capital to fund domestic production under these circumstances will be a continuing challenge. This industry will be competing against other industries offering higher returns for lower risks or even against lower cost foreign energy investment options. The slower the flow of capital, the longer it will take to rebuild and expand the domestic industry.*

*Providing access to the resource base will be critical and requires making some new policy choices with regard to federal land use.*

*These two issues are the ones that are particularly dependent on federal actions, and should be the immediate focus of the next Congress and the next Administration.*

*It is time for this country to take its energy supply issues seriously and develop a sound future policy. Certainly, there is room in such a policy for sound energy conservation measures*

*and protection of the environment. But, energy production – particularly petroleum and natural gas – is an essential component that must be included and addressed at once. Independent producers will be a key factor, and the industry stands ready to accomplish this component, if policy reflects that reality.*